



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : Lisa A. Fillebrown, et al.
Serial No. : 09/773,885
Filed : February 1, 2001
For : PERSONAL WIRELESS NETWORK
Group No. : 2155
Examiner : Philip B. Tran

MAILSTOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

DECLARATION OF PRIOR INVENTION UNDER 37 C.F.R. 1.131

1. This declaration is being made to establish invention of the subject matter of this application, in the United States (or a NAFTA or WTO country), on a date prior to the effective date of United States Patent No. 6,721,787 (the "Reference"), which was cited by the U.S. Patent and Trademark Office in an Office Action having a mailing date of May 19, 2005.

2. The person(s) making this Declaration are the named inventor(s) whose signature(s) appear(s) below.

3. Upon information and belief, the effective date of the Reference is February 10, 2000.

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4. Attached to this Declaration is a document entitled "Bluetooth Strategy Review" (31 pages), which was prepared and distributed internally at Nextcell (our former employer and the predecessor to the assignee of the present application) on or before February 9, 2000. The present invention is described in the attached document (*see, e.g.,* pages 9 *et seq.*). Accordingly, the present invention was conceived prior to the effective date of the Reference.

5. The United States provisional patent application, upon which the present application properly claims priority, was filed on June 16, 2000, approximately four months after the effective date of the Reference. Accordingly, there was due diligence from prior to the effective date of the Reference to the filing of the present application.

6. As demonstrated above, the invention in the present application was conceived at least as early as February 9, 2000, prior to the effective date of the Reference, and was coupled with due diligence from prior to such effective date to the filing of the present application.

7. Upon information and belief, this Declaration is being submitted prior to a final rejection of the present application.

8. As a person signing below:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the present application or any patent issued thereon.

SIGNATURES:

Inventor: Lisa A. Fillebrown

Inventor Residence: _____

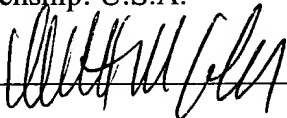
Inventor Country of Citizenship: U.S.A.

Inventor Signature: _____

Inventor: Kenneth M. Glover

Inventor Residence: 565 INDIAN ROCK DR.
COPPELL, TX 75019

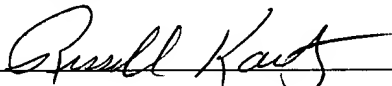
Inventor Country of Citizenship: U.S.A.

Inventor Signature: 

Inventor: Russell D. Kautz

Inventor Residence: 4248 Fryer Street
The Colony, tx 75056

Inventor Country of Citizenship: U.S.A.

Inventor Signature: 



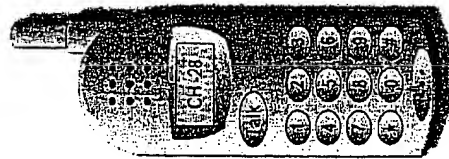
Bluetooth Strategy Review



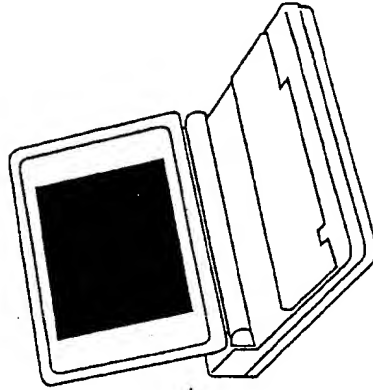
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The Bluetooth Beginning

Wireless Phone - Computer merge



Ericsson
Nokia



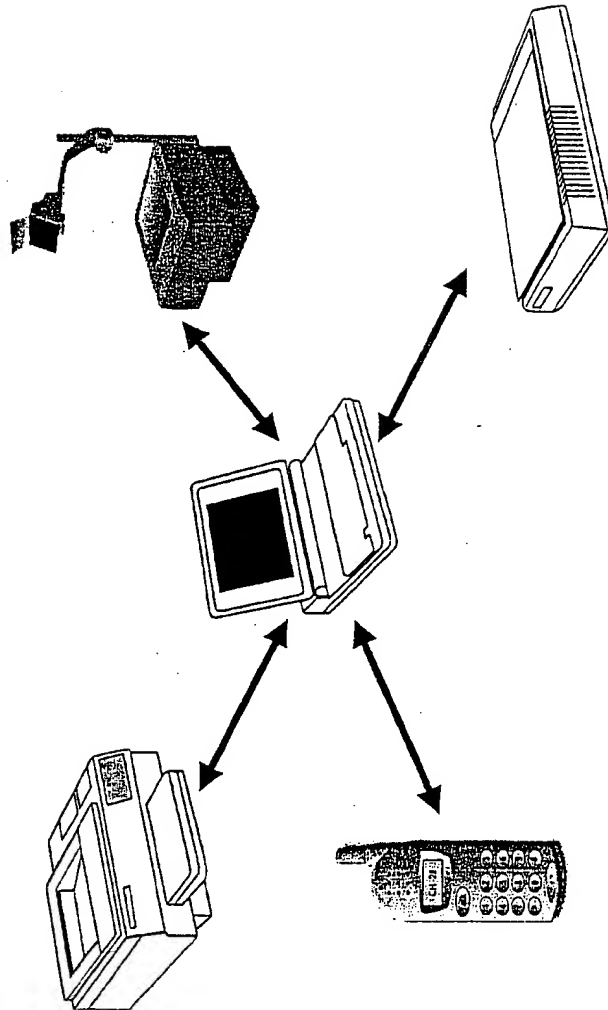
IBM
Intel
Toshiba

Bluetooth
connection



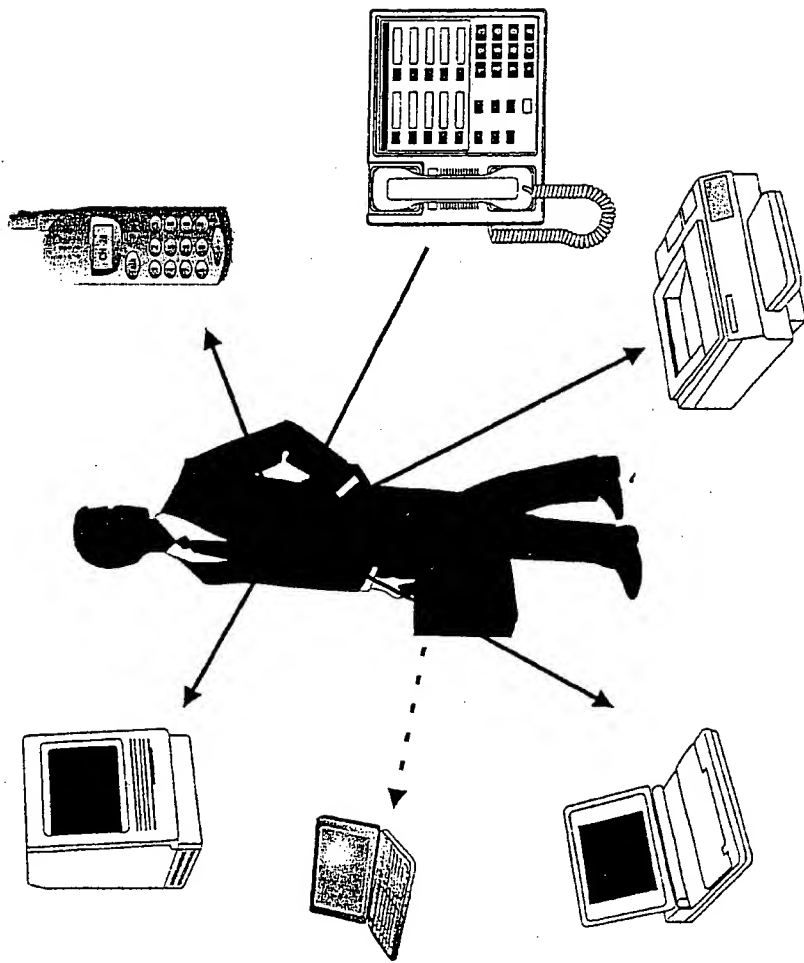
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Bluetooth Evolution- Cable Replacement-



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Bluetooth Evolution Personal Area Network





Bluetooth's Target Usage

- Personal Area Network (PAN)
- Point to point data transfer
- Components are low cost commodities
- No RF expertise required to implement





Typical Bluetooth Implementation

- Companies will be adding Bluetooth to existing products to make product differentiation, re-sell to existing customers, or to add new functionality.
- There is little talk about 'Bluetooth products', only current products that have been Bluetooth enabled.





Typical implementation applied to Nextcell

- Adding Bluetooth to our CDPD or GPRS products will only marginally increase number of sockets.
- Total sales will still depend more on other outside factors such as traffic speed and cost, infrastructure, and applications.





Nextcell's Opportunities

- Take a system view of Bluetooth
- Develop a implementation radically different then the rest of the Bluetooth community.
- Develop in a product area which will be new to Nextcell and unique in the market.



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The Nextcell Bluetooth Network

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Why a Bluetooth Network?

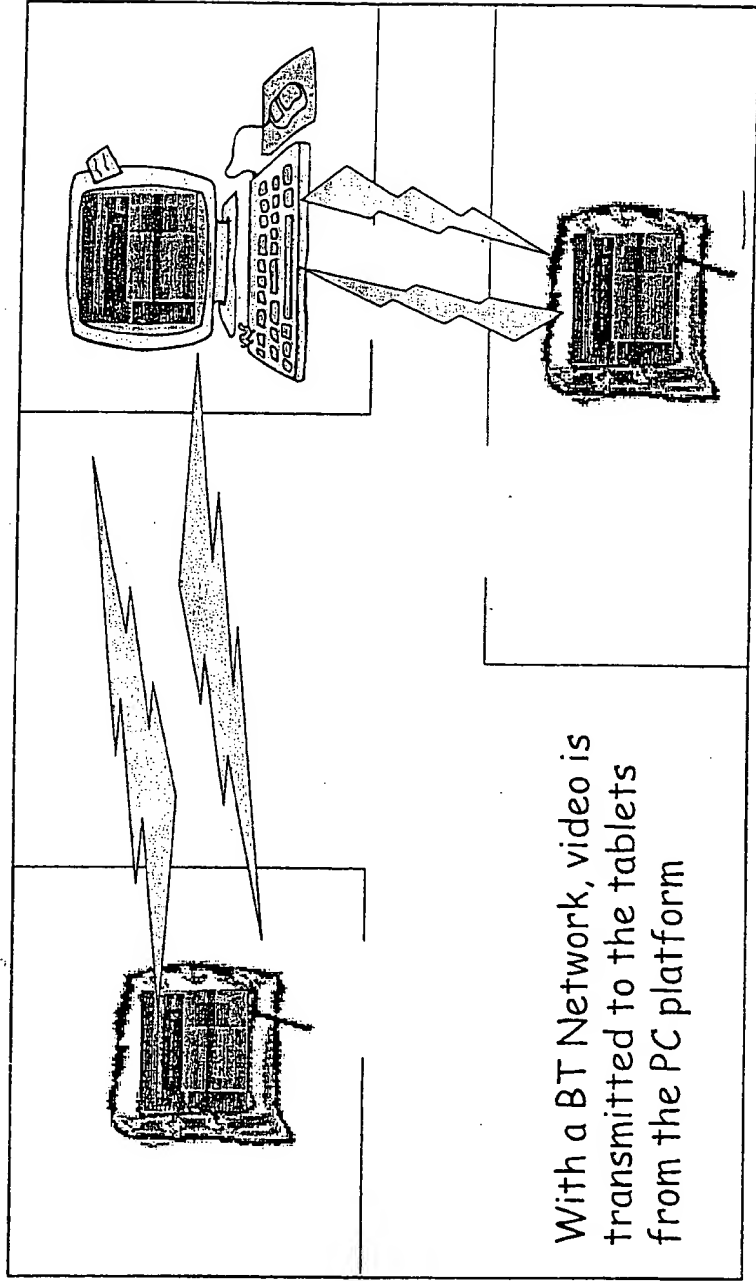
- Simpler Scalability
 - Cheaper (802.11 and Bluetooth)
- Portability
 - Adhoc Nature
- BT Scatternet Experts
 - Current BT market focusing on Point-to-Point
- Multi-market appeal
 - Consumer/home
 - SOHO
 - Enterprise
 - Industry specific



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Home Network

FUTURE NETWORK



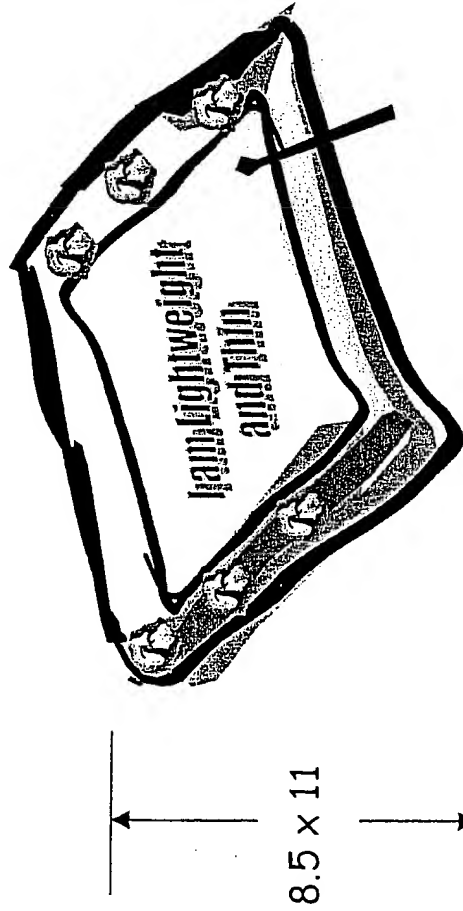
Home Network Components

- Hardware
 - HW interface to PC with BT module
 - BT Tablet
- Software Applications running on the PC
 - SW to launch applications
 - SW to route video to a BT Device
 - SW to perform network routing
 - SW keyboard for data input



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Tablet Evolution

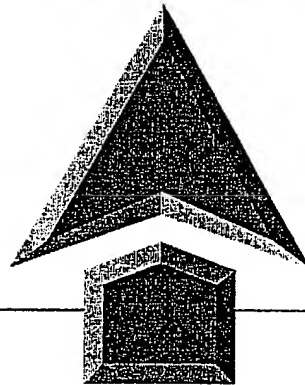


- Better Graphics
- Increase Size of the Display
- Lower Cost
- Real-Time Video Support
- Keyboard
- Different Stylus Types
- 802.11 Support
- Credit Card Readers (point-of-sale)



Preliminary Table Component Cost

LCD	\$80
Processor	\$20
Battery	\$20
Charger	\$10
Audio	\$5
BT module	\$15
Packaging	\$20
Assembly	\$20



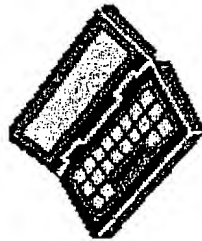
\$190





Product Differentiators

- Palm Pilot
- Laptop
- eBook Reader

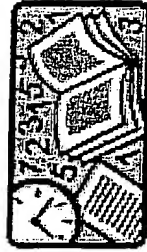


BT Tablet has
Better Graphics

BT Tablet can access
other BT devices and
PC SW Applications



BT Tablet costs
less



BT Tablet has
Better Graphics

BT Tablet has Internet
Access

BT Tablet can access
other BT devices and
PC SW Applications



Home Network Features

- Used as a wireless extension of the PC within the home
- Video output is transmitted via BT link to tablet(s)
 - User has access to all applications on the PC
 - Tablet could also act as a device dependent portal for advertising, as well as Internet surfing and eBooks access
 - Video refresh rate over a 732.2 Kbps asynchronous channel is approximately 3.4 seconds
- Tablet has potential to access other BT devices
 - 3rd party devices
 - Additional BT Nextcell devices
 - BT to IR/IR to BT converter (consolidate remote controls)
 - BT repeater
 - Architect the solution for expansion via software upgrade
 - Nextcell controlled code



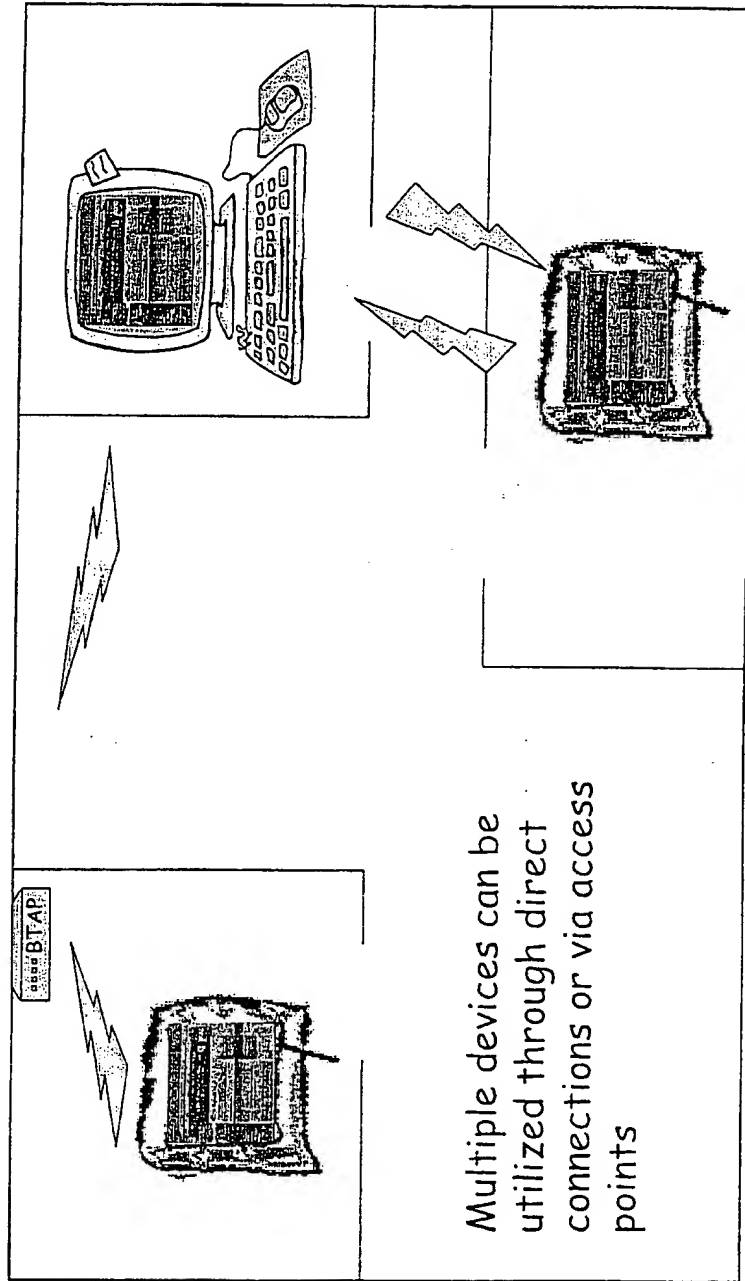
Office Automation

- Two target markets
 - SOHO
 - Enterprise
- SOHO
 - Consumer product solution could be used for supporting a small number of devices in a small office setting
- Enterprise
 - Additional network capability can be added to enhance the overall solution



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SOHO Network





Enterprise Network

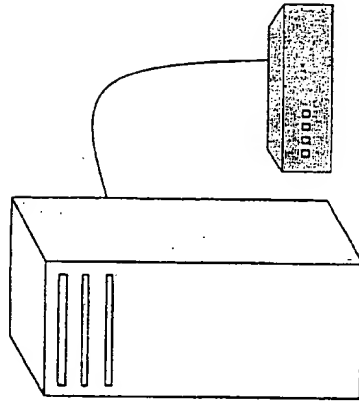
- Additional network capabilities
 - BT Server
 - Server product that facilitates BT-specific applications
 - Integrated 802.11 transceiver operating at 5.2 GHz
 - BT Access Point
 - Utilize alternative wireless access in conjunction with BT for transport
 - 802.11 at 5.2 GHz
 - PBX interface
 - Port PBX information/functionality to tablet
 - CID to tablet when away from desk
 - Unified messaging
 - Phone setup and management
 - Potential for remote voice support





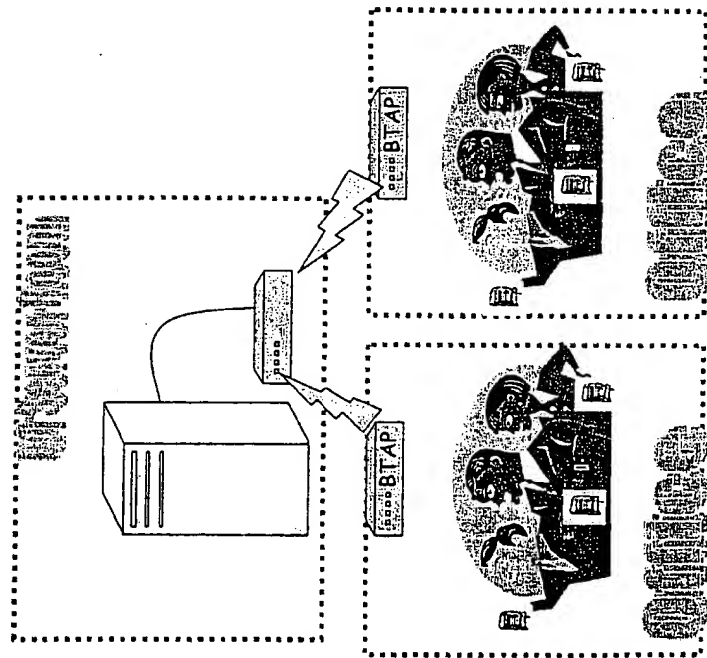
Bluetooth Server

- RS232 Connection to Server or PC Card
- 802.11 Capability - Used with BTAP
- Manages multiple network interconnections
- Would implement BT specific applications
- Would follow LAN access profile defined by BT SIG



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Bluetooth AP



- 802.11 Capability - Used as a high-speed, wireless backbone for data communication
- Used for Picking up to 7 Bluetooth Devices that are within 100 meters from BTAP
- Spaced every 100 meters or less.
- May be used in every office for Bluetooth devices.





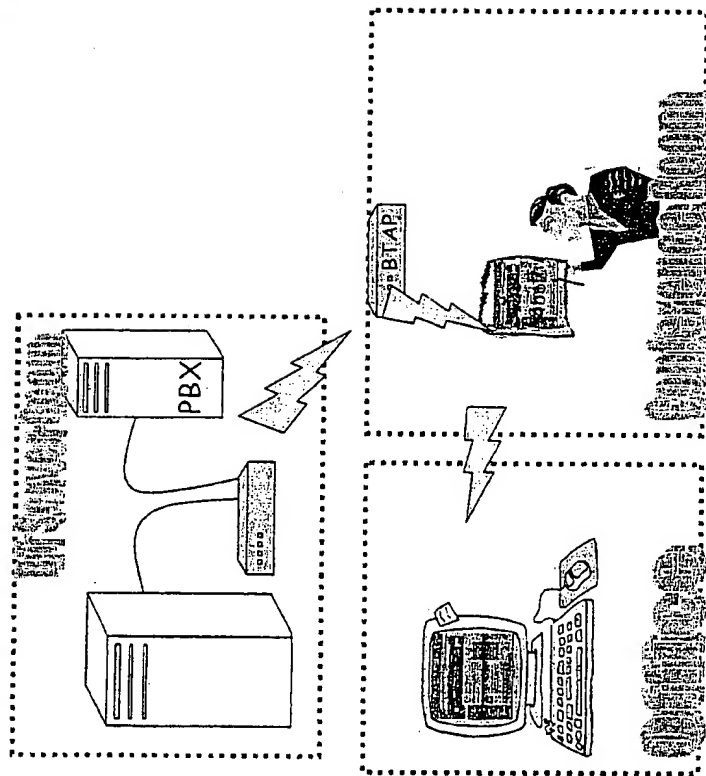
Enterprise Network Concepts

- Server and/or workstation access
- Inter-office paging/messaging
- Whiteboard/application sharing
- Handwriting recognition



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Server and/or Workstation Access

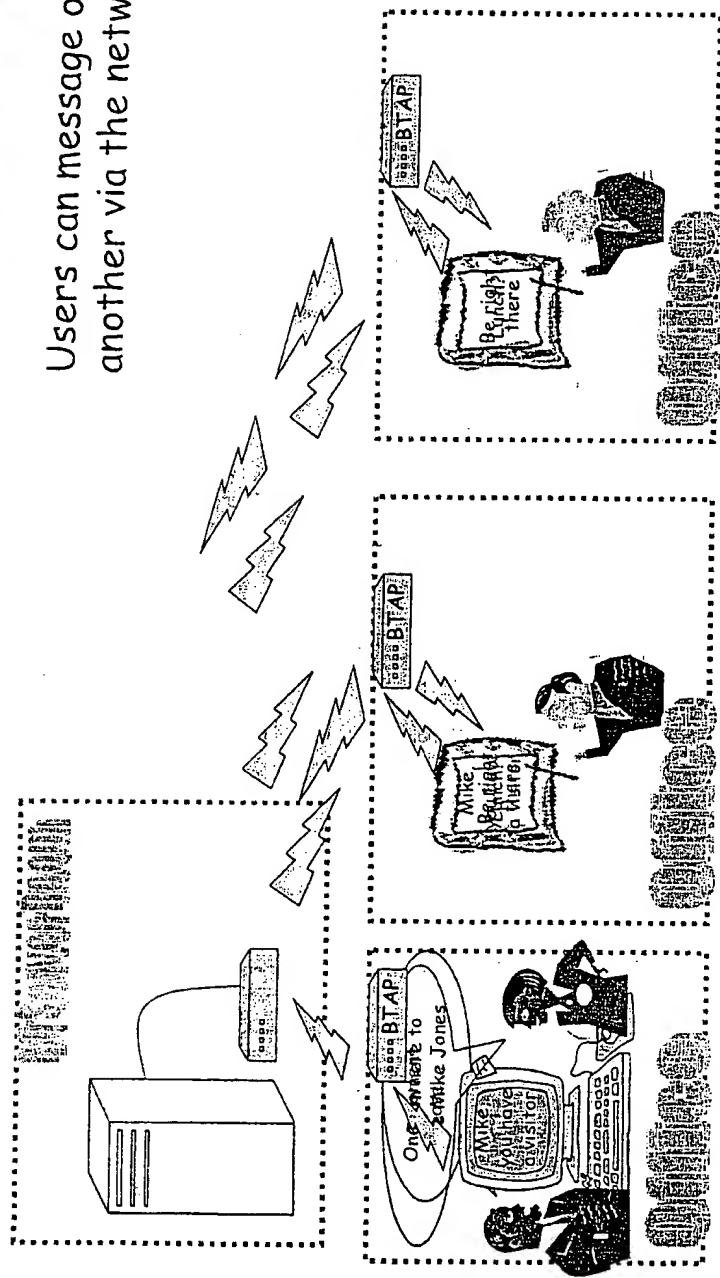


The user also has the option to access the BT enabled server for specific applications

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Inter-office paging/messaging

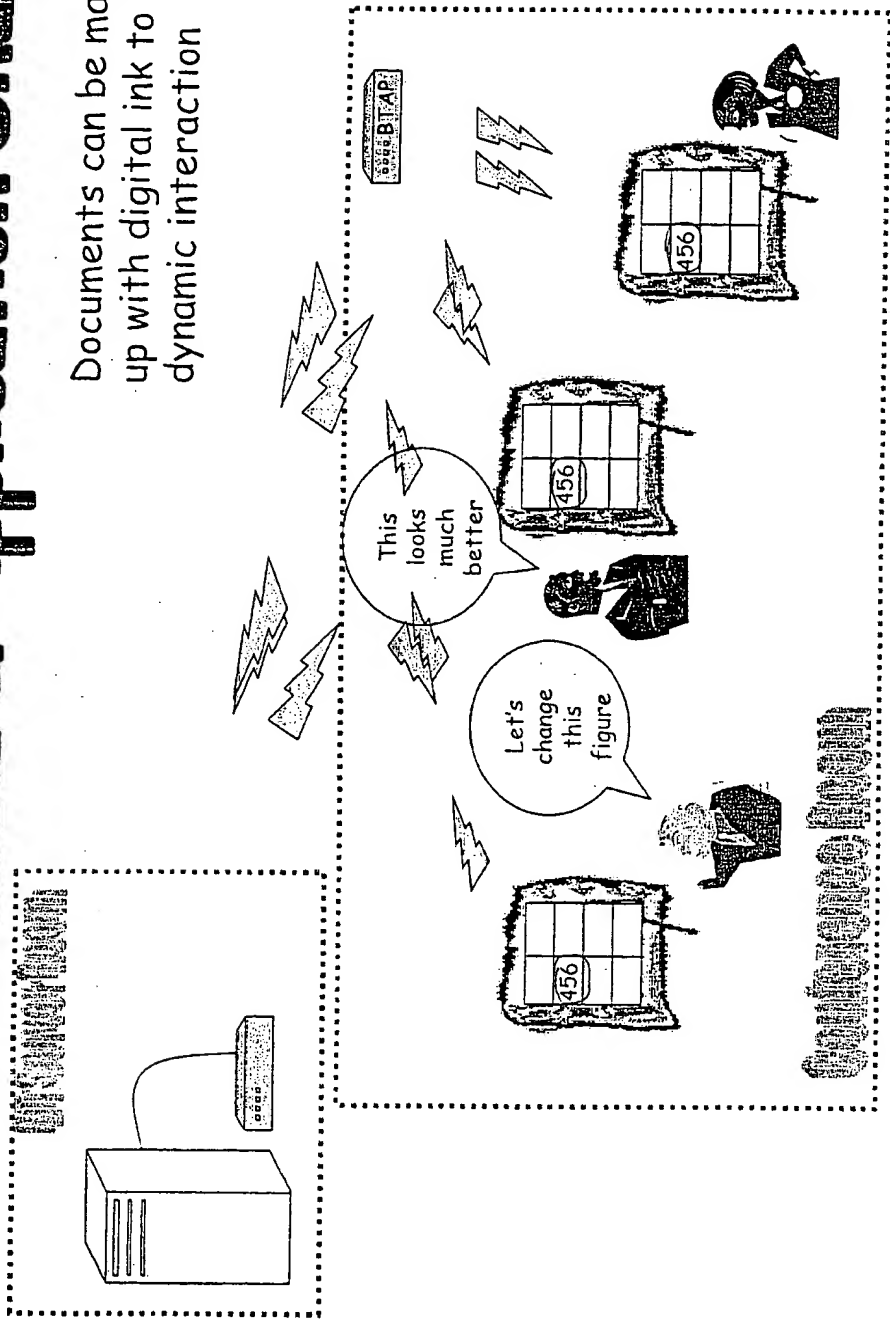
Users can message one another via the network



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Whiteboard/Application Sharing

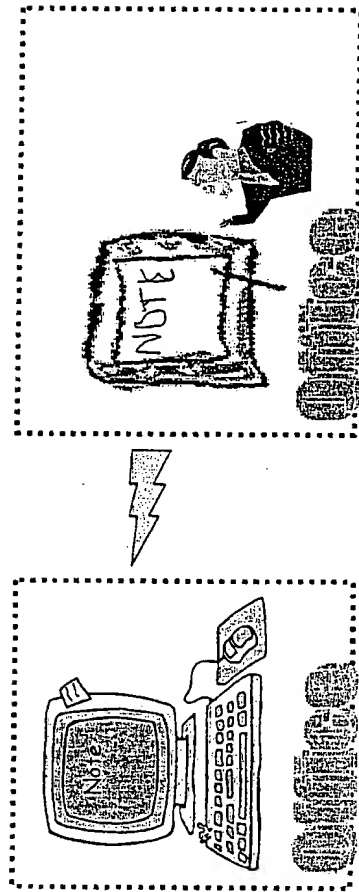
Documents can be marked-up with digital ink to allow dynamic interaction



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Handwriting Recognition

Once the data is transferred, an application is executed against the digital ink information



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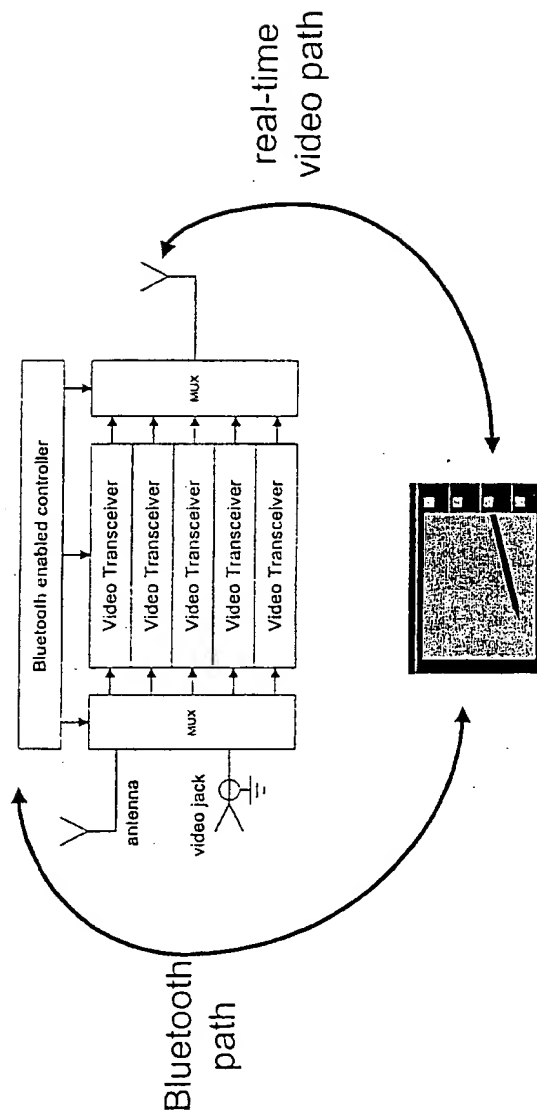
Auxiliary System Components

- Real time Video
- Wireless keyboard
- BT Phone
- HomeRF adapters





Adding real time video to the Bluetooth Network



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Other Network Environments

- Restaurants ■ Take and fill orders, billing
- Schools ■ Test taking, reading
- Sales ■ Less equipment
- Hospitals ■ Access Records
- Airplanes ■ Internet Access
- Hotels ■ use with AOL
- Custom Application Design
 - Opportunity to design and develop industry specific solutions incorporating the product(s)





Content Relationship Approach

- Could we subsidize the HW cost with content relationship for a particular service?
- Partner with solution specific web entity
 - Design application(s) that are only accessible through the BT Network design
 - Device dependent portal
 - Service examples
 - Autobytel
 - Vehicle specific transaction service
 - PeaPod
 - Shopping application
 - Aether
 - Real-time trading and market information
 - Portfolio management
 - Day trading
 - DirecTV
 - Utilize web-centric programming guides for creation of custom remote control and viewing options



Next Steps Towards Defining the Project

- Tablet Graphics
 - Analyze LCD display options
 - Learn 'touch screen' technology
 - Get familiar with graphics files, compression and transmission options
- Server Architecture
 - Research remote application startup in virtual video mode
 - Research sending video over serial port
 - Further define routing requirements
- Bluetooth Component
 - Start a Bluetooth emulation over a COM1 serial port
 - Start designing L2CAP layer



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